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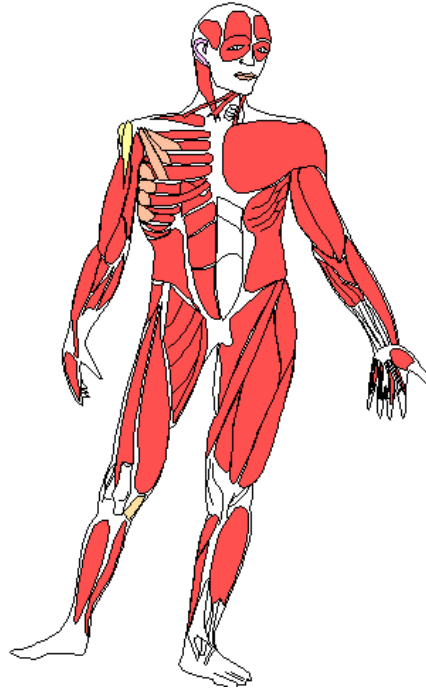
# A Search for Simultaneity

Subroto Bagchi

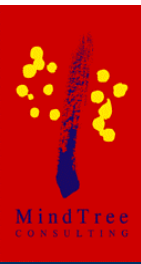
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**Aug 2005**

# Simultaneity defined



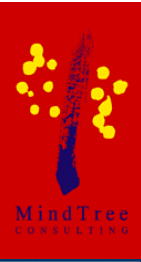
Simultaneity is “zero latency” state in an organism. Evolved organizations mimic the behavior of organisms. You explore/exploit at the same time.



## Attributes of a "Simultaneous organism"

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- There is an overall sense of purpose at all times - All input/output devices act in harmony through shared understanding
- Able to receive, transmit, analyze, decide, direct and act on impulses
- Progressively shifts from the reactive to the anticipative through learnability – "it is learning by enactment"

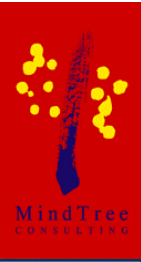


# Organizations and Simultaneity

1990's:

Simultaneity = "Zero Latency" between time taken to take a decision, transmit that decision to its point of implementation



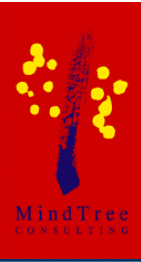


# Organizations and Simultaneity

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## Issues

1. Tended to be “product-out” and not “customer-in”
2. There was near-zero interactivity at all levels
3. Decisions were point based, not a continuum
4. Organizations could afford to be non-simultaneous.  
They led discrete existence in time and space
5. Conventional growth, predictable market



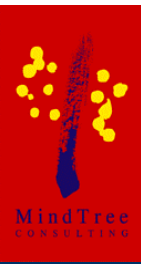
# Organizations and Simultaneity

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2000's:

Simultaneity = Zero Latency between time taken to take a decision, transmit that decision and implement that decision.

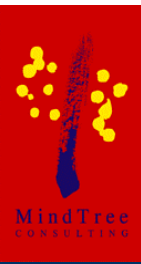
**Simultaneity = Zero Latency between thought, transmission of thought and activation of a collaborative framework of decision making.**



# Attributes of a Simultaneous organization

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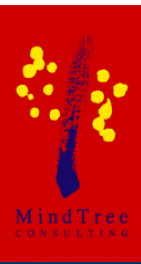
- They are internally and externally simultaneous – internal complexity must match external complexity
- Simultaneity = infrastructure x content (delivered fresh)
- Simultaneity feeds on thought leadership
- Simultaneity thrives on interactivity
- Simultaneous organizations do not have 'response void'. There is commitment to speed



# Attributes of a Simultaneous organization

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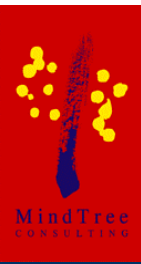
- Simultaneous organizations place high premium on culture. Technology is incidental
- Simultaneous organizations are hierarchy free and transparent
- Simultaneous organizations view decisions as event led, collaborative and a continuum as against a push based, 'point product'
- Simultaneity occurs when decisions are accompanied by the algorithm behind it and 'knowledge is free'



## How technology is impacting simultaneity

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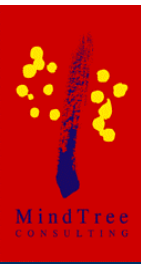
- Processor power continues to improve 2x every 18 months as given by Moore's law
- Storage is growing 2x every 9 months
- Graphics – polygons/sec are getting 2x better every 9 months
- Fiber optics capacity is getting higher at 2x every 6 months
- Internet traffic is becoming 2x every 12 months
- Power of Internet grows @ square of number of users
- Convergence is leading to a simultaneous state



## How technology is impacting simultaneity

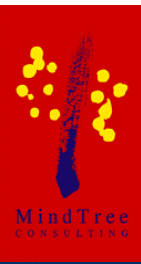
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- In 2003, wireless telephony overtook wire line. Voice, Data and Image converge with broadband making the mobile workplace and “connected” home a reality
- After a drought, telecom is back – non-US telecom growth is forecast at double digit to hit \$2 trillion by 2007
- Wi-Fi is a recurrent theme in every trend watch. Bluetooth is likely to become mainstream in 2005
- Voice over IP – increasingly pervasive
- At the center of telecom revolution is world’s changing demographics and convergence



## Embedded technology is impacting simultaneity

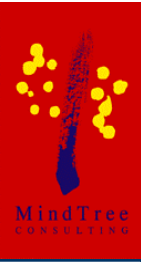
- MindTree's customer ESP, a leader in US emission control market is moving from on-board testing to remote testing of vehicle emission – a base station will test a highway vehicle – communicate with the DMV database and update the onboard RFID chip at the same instant
- MindTree has designed sonar collision avoidance system being deployed by Nissan that will prevent a car from driving in to stationery objects. In the next phase, sonar guided vehicles will sense moving objects



## The Internet is impacting simultaneity

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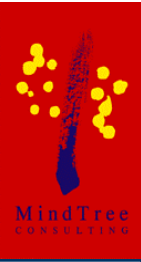
- It is not equal to dotcom, now a matter of serious corporate strategy
- Avis and Budget together are a \$4 billion car rental business. MindTree designed Avis.com. Almost a quarter of reservation revenue is on-line. Impact: huge savings, customer intimacy
- E-Bay is real. Real customers, things, revenues and profits
- Deccan Aviation – India's low cost carrier is also No.1 e-commerce user



## Application harnessing creating simultaneity

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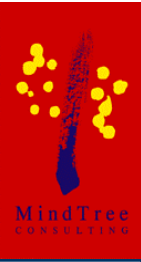
- Web services is becoming a key tool for harvesting “in the ground” information investment
- Data warehousing & Business Intelligence are becoming major areas & marketing folks are saying, “give me analytics”
- Organizations are discovering the power of Knowledge Management: building an ecosystem of human+structural+customer capital



## Simultaneity & global outsourcing

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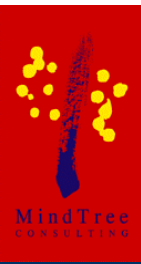
- Outsourcing now means Off-shoring. It is a recognized, pervasive global trend
- MindTree coined the term “One Shore” to indicate that people need to rise above thinking Return-on Investment to Return-on-Knowledge
- Outsourcing is causing serious concerns on job loss & security
- The US will lead with innovation but R&D will be global



## How culture is impacting simultaneity

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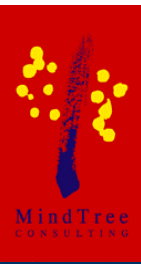
- Businesses and the technology they employ respond to larger cultural stimuli
- We see the current sub-twenty five population leading adaptation – driven by “Digital Instant Gratification”, *massification* of desire and selective anonymity
- Should IM be banned at work? Do we really know the answer?
- Desire is a strong driver, convergence is a cell phone and simultaneity is a state of mind



## Simultaneity is causing concerns

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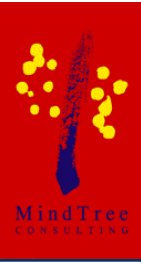
- It is not just Big Brother. Sometimes it is Corporations who can & do abuse data privacy
- Who does what and where with who is a matter of zeros and ones: This can make people Vulnerable.
- Digital Voyeurism: You can suck out corporate data with a thumb sized device
- IP Loss: videophone at work? BLOG on what you did today?
- Tech-terror: The worst is not over
- Regulation to protect is also becomes regulation to restrict freedom



## Leadership & simultaneity

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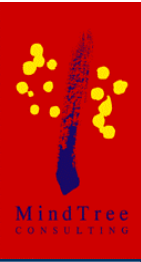
- Do not take a “seasonal” view of technology. Take a long view of time
- View simultaneity as a “capacity precursor”. It is the pillar on which you build capacity. Capacity without simultaneity is self destructive.
- Front load with thought leadership and sustain it with innovation, ease of service and make it as secure as you can



## Leadership & simultaneity

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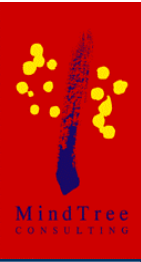
- In building simultaneity, “Context, Communication & Collaboration” become key attributes:
  - Leaders will need to see and set the context for technology
  - They will need to communicate it better
  - They will have to deliver unusual solutions through increasingly collaborative models
- Inclusion will be a key design consideration for developers – technological convergence will just be an enabling factor



## Simultaneous Partnership – CIO & The End User

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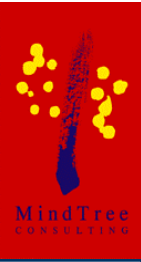
- Increasingly CIO staff is required to “embed” in the theater of operation
- End-user require CIO organization to “dis-intermediate” by taking on roles fulfilled by external agencies as well as dis-intermediate knowledge
- Customers and suppliers require upstream value engagement – technology must make customer’s customer and supplier’s supplier to feel the impact
- There is insistence on a new corporate metric for IT effectiveness – spend can no more be a percentage of sales



## Simultaneous Partnership – CIO & The End User

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- End-user want CIO organization to collaborate with “big ideas”
- Innovation is becoming an important IT output
- Emergence and not predictive outcome is becoming a key business imperative
- CIO organizations are required to co-own outcome
- Change is the operative word for any engagement with the future



## The Last Word

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*God created man in his own image. That image is simultaneous. Anything human beings will try to create, be it a business model or technology or an application, will seek a simultaneous state*

A simultaneous state is a more natural state

